

# Adopt-An-Element

## Requirements:

### 1) Complete an Adopt An Element information sheet. (60% of grade)

You may use a variety of reference sources. Possible ideas are encyclopedias (book or CD Rom), science encyclopedias, science catalogs, magazines, and/or Internet sites\*. Information sheets must be neat, written in black ink, and contain all the information requested. You also need to provide a list of your sources on the back of your information sheet. A minimum of three sources are required.

### 2) Create an advertisement for your element. (40% of grade)

The advertisement must include the element's name, symbol, atomic number, atomic mass, cost, and an advertising slogan that describes one or more of its important uses. Advertisements must be neat, colorful, and contain all the information listed above. You may add pictures that relate to your advertisement theme.

## Example:

Be sure to include:

- ✓ Element's symbol
- ✓ Element's name
- ✓ Atomic number
- ✓ Atomic mass
- ✓ Ad slogan
- ✓ Cost
- ✓ Your name

You may add pictures or drawings that illustrate the various uses for your element.

**Your ad must follow the same format as this example!**

The example advertisement is enclosed in a rectangular box. At the top left is the atomic number '33' and at the top right is the atomic mass '74.9'. In the center, the symbol 'As' is written in a large, bold font, with the name 'Arsenic' written below it in a slightly smaller, bold font. Below the name is a two-line slogan: 'Arsenic's a sure fire way to deal with a nasty rat, It works better than a mean old cat!'. At the bottom left is the cost: 'Cost = \$3.20 for 1 gram'. At the bottom right is the name 'John Smith'. Arrows point from labels on the right to the corresponding information in the box: 'Atomic Mass' points to '74.9', 'Atomic Number' points to '33', 'Symbol & Name' points to 'As' and 'Arsenic', 'Slogan' points to the two-line text, 'Cost' points to 'Cost = \$3.20 for 1 gram', and 'Name' points to 'John Smith'.

|   |            |
|---|------------|
| 33  | 74.9       |
| <b>As</b>   |            |
| <b>Arsenic</b>  |            |
| Arsenic's a sure fire way to deal with a nasty rat,<br>It works better than a mean old cat! |            |
| Cost = \$3.20 for 1 gram  | John Smith |

A list of periodic table sites is available on

**The Science Spot**

<http://sciencespot.net/>

Go to **Kid Zone**, then choose **Chemistry Links**

# Adopt An Element

Name \_\_\_\_\_

## Fact Sheet

Element \_\_\_\_\_

|               |               |                |
|---------------|---------------|----------------|
| Symbol        | Atomic Number | Atomic Mass    |
| _____         | _____         | _____          |
| # of Protons  | # of Neutrons | # of Electrons |
| _____         | _____         | _____          |
| Melting Point | Boiling Point | Normal Phase   |
| _____ °C      | _____ °C      | _____          |

Cost = \_\_\_\_\_ for \_\_\_\_\_

Classification:   ☐ Nonmetal   ☐ Metal   ☐ Metalloid

My element belongs to the \_\_\_\_\_ family.

Origin of Name \_\_\_\_\_

Discovered by \_\_\_\_\_ in \_\_\_\_\_

Interesting Info:                      May include important uses, interesting facts, common compounds, etc.

1.

2.

3.

4.

5.

6.

# Adopt An Element

## Grade Sheet

Name \_\_\_\_\_

### Advertisement = 24 points (40%)

- **Provided basic information\*** ..... + **12** \_\_\_\_\_
  - ☐ Atomic #      ☐ Symbol      ☐ Cost
  - ☐ Atomic mass    ☐ Name      ☐ Student's Name
- **Slogan and pictures relevant** ..... + **10** \_\_\_\_\_
- **Followed directions** ..... + **2** \_\_\_\_\_  
Neat, correct spelling/format, original

### Information Sheet = 36 points (60%)

- **Provided basic information** ..... + **10** \_\_\_\_\_
  - ☐ Name      ☐ Symbol      ☐ Atomic #      ☐ Atomic Mass
  - ☐ Protons      ☐ Neutrons      ☐ Electrons      ☐ Melting Point
  - ☐ Boiling Point    ☐ Normal Phase
- **Other information** ..... + **11** \_\_\_\_\_
  - ☐ Cost
  - ☐ Nonmetal/Metal/Metalloid
  - ☐ Family
  - ☐ Origin of Name
  - ☐ ☐ Discovery & Date
  - ☐ ☐ ☐ ☐ ☐ ☐ Interesting Information/Uses
- **References** ..... + **9** \_\_\_\_\_  
Minimum of 3; provided required information; correct format
- **Miscellaneous** ..... + **6** \_\_\_\_\_  
Black ink, complete sentences, correct spelling, neat

**Total Points** = \_\_\_\_\_ **out of 60** = \_\_\_\_\_%

**A    B    C    D    F**

# Adopt-An-Element Project List

# Teacher Information

Visit the Chemicool site for details on cost information.

\* Cost listed on Los Alamos

\*\* No cost available

|    |  |     |  |      |  |
|----|--|-----|--|------|--|
| H  |  | Ga  |  | Re   |  |
| He |  | Ge  |  | Os   |  |
| Li |  | As  |  | Ir   |  |
| Be |  | Se  |  | Pt   |  |
| B  |  | Br  |  | Au   |  |
| C  |  | Kr  |  | Hg   |  |
| N  |  | Rb  |  | Tl   |  |
| O  |  | Sr  |  | Pb   |  |
| F  |  | Y   |  | Bi   |  |
| Ne |  | Zr  |  | Rn*  |  |
| Na |  | Nb  |  | Ce   |  |
| Mg |  | Mo  |  | Pr   |  |
| Al |  | Tc* |  | Nd   |  |
| Si |  | Ru  |  | Pm*  |  |
| P  |  | Rh  |  | Sm   |  |
| S  |  | Pd  |  | Eu   |  |
| Cl |  | Ag  |  | Gd   |  |
| Ar |  | Cd  |  | Tb   |  |
| K  |  | In  |  | Dy   |  |
| Ca |  | Sn  |  | Ho   |  |
| Sc |  | Sb  |  | Er   |  |
| Ti |  | Te  |  | Tm   |  |
| V  |  | I   |  | Yb   |  |
| Cr |  | Xe  |  | Lu   |  |
| Mn |  | Cs  |  | Th*  |  |
| Fe |  | Ba  |  | Cm*  |  |
| Co |  | La  |  | Cf*  |  |
| Ni |  | Hf  |  | U**  |  |
| Cu |  | Ta  |  | Ra** |  |
| Zn |  | W   |  | Es** |  |